

REMARKS

Claims 1-55, 57, 59-192 are presently pending in the application. Claims 20-26, 37-55, 57, 59-91, 102-126, 137-143, 153-159, 162-168, and 178-190 have been withdrawn from consideration. With respect to the claims presently being considered by the Office, namely claims 1-19, 27-36, 92-101, 127-136, 144-152, 160, 161, 169-177, 191 and 192, an anticipation issue was raised in the February 25, 2008 Office Action under 35 U.S.C. §102(a) and (e) based on U.S. Patent No. 6,187,005 (Brace et al.) (hereinafter referred to as "the Brace et al. reference"). This response addresses every substantive issue raised in the Office Action.

I. **REJECTIONS OF CLAIMS UNDER 35 U.S.C. §102(a) and (e) ARE TREATED.**

Regarding the anticipation issue raised by the Office with respect to claims 1-19, 27-36, 92-101, 127-136, 144-152, 160, 161, 169-177, 191 and 192 under 35 U.S.C. §102(a) and (e), applicant's counsel has carefully studied the reasoning for the rejection provided in the Office Action, together with the Brace et al. reference relied upon. Applicant respectfully submits in good faith that certain aspects of the invention are unanticipated, nonobvious and allowable over the Brace et al. reference. In some instances, additional limitations have been incorporated into the independent claims, without prejudice to any future submission of

the original claims in another application, which are believed to render said claims allowable.

- A. The Brace et al. Reference Does Not Disclose, Teach or Suggest an Elongate Support Member That Is Secured to a Connecting Member by a Clamping Force Provided at Least in Part by a Fastening Member as Claimed in Independent Claims 1, 92, 160 and 175.

Regarding independent claims 1, 92, 160 and 175, the February 25, 2008 Office Action suggested that the Brace et al. reference discloses all of the claimed elements of independent claims 1, 92, 160 and 175 and on that basis rejected those claims. Applicant respectfully traverses those rejections because the Brace et al. reference does not disclose, teach or suggest a connecting member having a female-tapered first through-passage formed therein or a fastening member having a male-tapered external portion configured and dimensioned to matingly engage with the sidewalls defining the female-tapered first through-passage as originally claimed in independent claims 1, 92, 160 and 175. Even still, applicant has amended independent claims 1, 92, 160 and 175 to more accurately clarify the differences between applicant's invention and the Brace et al. reference.

In this response, applicant is amending claims 1, 92, 160 and 175 to include an element where an elongate support member is secured to a connecting member by a clamping force provided at least in part by a fastening member as illustrated and supported in FIG. 2 (see, *inter alia*, applicant's specification on page 21, line 1 through page 22, line 9). When this element is combined with the

other elements already present in applicant's claims 1, 92, 160 and 175, it results in a combination of elements that is not disclosed, taught or suggested by the Brace et al. reference. More specifically, the Brace et al. reference does not disclose, teach or suggest an elongate support member that is secured to a connecting member by a clamping force provided at least in part by a fastening member.

Further, claims 92 and 160 provide a further element where the intercoupling means (claim 160) or connecting member (claim 92) further comprises a non-segmented unitary member containing both the female-tapered first through-passage and the aperture, and is configured such that compression of an upper free end portion of the intercoupling means or connecting member toward the female-tapered first through-passage operates to contract the aperture. That element is not disclosed, taught or suggested in the Brace et al. reference.

Instead, the Brace et al. reference discloses, teaches and suggests a connector 12, 48, 54, 60, 74, 86, 92, and 112 having a channel for receiving and securing a rod 16 to the connector using a set screw 30 (see column 3, lines 26-30) or other mechanism, such as a threaded yoke 76 or nut pushing an apron 78 against the rod (see FIGS. 7 and 8), where the clamping of the rod in the channel occurs without the assistance of the bone screw or fastener 14 (see FIGS. 1-15). Unlike applicant's invention in claims 1, 92, 160 and 175, the clamping force or locking of the rod 16 to the

connector in the Brace et al. reference is completely independent of the bone screw or fastener 14, such that the bone screw or fastener 14 does not operate to provide any clamping force to secure the rod to the connector. Accordingly, amended claims 1, 92, 160 and 175 are believed to be allowable for at least the reasons expressed above.

Since the spinal fixation device of the Brace et al. reference does not contain each and every element of independent claims 1, 92, 160 and 175, that reference fails to anticipate independent claims 1, 92, 160 and 175 or render those claims obvious, and a finding of the same is respectfully requested. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81, 90 (Fed. Cir. 1986); *In re Donohue*, 226 USPQ 619, 621 (Fed. Cir. 1985); *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.*, 224 USPQ 409, 411 (Fed. Cir. 1984). Further, since the Brace et al. reference fails to teach or suggest the concepts present in independent claims 1, 92, 160 and 175, those claims are allowable over the Brace et al. reference under 35 U.S.C. § 103, as that section might be applied.

Dependant claims 2-19, 191 and 192 depend from claim 1 or a claim depending from claim 1, and are therefore believed to be allowable for at least the reasons given in support of claim 1. Applicant further requests separate consideration by the Office of these dependent claims on their own merits, since some or all of said dependent claims are believed to be allowable regardless of whether their base independent claim is allowable.

Dependant claims 93-101 depend from claim 92 or a claim depending from claim 92, and are therefore believed to be allowable for at least the reasons given in support of claim 92. Applicant further requests separate consideration by the Office of these dependent claims on their own merits, since some or all of said dependent claims are believed to be allowable regardless of whether their base independent claim is allowable.

Dependant claims 161, 169-174 depend from claim 160 or a claim depending from claim 160, and are therefore believed to be allowable for at least the reasons given in support of claim 160. Applicant further requests separate consideration by the Office of these dependent claims on their own merits, since some or all of said dependent claims are believed to be allowable regardless of whether their base independent claim is allowable.

Dependant claims 176 and 177 depend from claim 175 or a claim depending from claim 175, and are therefore believed to be allowable for at least the reasons given in support of claim 175. Applicant further requests separate consideration by the Office of these dependent claims on their own merits, since some or all of said dependent claims are believed to be allowable regardless of whether their base independent claim is allowable.

- B. Independent Claims 27 and 144 Contain Relational Elements Between the Connecting Member and the Fastening Member That Are Not Disclosed, Taught or Suggested by the Brace et al. Reference.

Regarding independent claims 27 and 144, the February 25, 2008 Office Action suggested that the Brace et al. reference discloses

all of the claimed elements of independent claims 27 and 144 and on that basis rejected those claims. Applicant respectfully traverses those rejections because the Brace et al. reference does not disclose, teach or suggest a first through-passage and a second through passage formed in a connecting member, wherein a female-threaded recess of a fastening member is disposed in alignment with a second through-passage of the connecting member when the male-tapered external portion of the fastening member is disposed in engagement with the sidewalls defining the female-tapered first through-passage of the connecting member. Independent claims 27 and 144 are claiming a relationship between the connecting member and the fastening member that is not disclosed, taught or suggested by the Brace et al. reference.

Brace et al. does not disclose, teach or suggest a connecting member having a first and second through-passage, where a female-threaded recess of a fastening member is disposed in alignment with a second through-passage of the connecting member when a male-tapered external portion of the fastening member is disposed in engagement with the sidewalls defining the female-tapered first through-passage of the connecting member as contained in independent claims 27 and 144. This alignment allows a fastener to pass through the second through-passage and into the female-threaded recess of the fastening member causing a clamping action to occur. Conversely, the Brace et al. reference discloses, teaches and suggests a single through-passage (instead of two

through-passages) formed in the connecting member that functions to permit the bone screw or fastener 14 to move in a polyaxial manner prior to being locked (see column 3, lines 41-53). The Brace et al. single through-passage does not permit any clamping of the rod or elongate member. Accordingly, claims 27 and 144 are believed to be allowable for at least the reasons expressed above.

Since the spinal fixation device of the Brace et al. reference does not contain each and every element of independent claims 27 and 144, that reference fails to anticipate independent claims 27 and 144 or render those claims obvious, and a finding of the same is respectfully requested. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81, 90 (Fed. Cir. 1986); *In re Donohue*, 226 USPQ 619, 621 (Fed. Cir. 1985); *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.*, 224 USPQ 409, 411 (Fed. Cir. 1984). Further, since the Brace et al. reference fails to teach or suggest the concepts present in independent claims 27 and 144, those claims are allowable over the Brace et al. reference under 35 U.S.C. § 103, as that section might be applied.

Dependant claims 28-36 depend from claim 27 or a claim depending from claim 27, and are therefore believed to be allowable for at least the reasons given in support of claim 27. Applicant further requests separate consideration by the Office of these dependent claims on their own merits, since some or all of said dependent claims are believed to be allowable regardless of whether their base independent claim is allowable.

Dependant claims 145-152 depend from claim 144 or a claim depending from claim 144, and are therefore believed to be allowable for at least the reasons given in support of claim 144. Applicant further requests separate consideration by the Office of these dependent claims on their own merits, since some or all of said dependent claims are believed to be allowable regardless of whether their base independent claim is allowable.

C. The Brace et al. Reference Does Not Contain the Structural Features Contained in Independent Claim 127.

Regarding independent claim 127, the February 25, 2008 Office Action suggested that the Brace et al. reference discloses all of the claimed elements of independent claim 127 and on that basis rejected the claim. Applicant respectfully traverses that rejection because the Brace et al. reference does not disclose, teach or suggest the concept of a fastener (*see for example* reference numeral 90 in FIG. 2 of the present application) passing through a second through-passage of an upper portion of a connecting means (*see for example* reference numeral 60 in FIG. 2 of the present application) and into engagement with sidewalls that define a recess in an attaching means (*see for example* reference numeral 50 in FIG. 2 of the present application) when the attaching means and the connecting means are in frictional engagement (*i.e.*, when the male external taper of the attaching means mates with the sidewalls defining the first through-passage [formed in the lower portion] of the connecting means in frictional engagement) to thereby cause a clamping action to occur locking an elongate

support member relative to the bone as claimed in independent claim 127.

As stated above, independent claim 127 is claiming structural relationships between a fastener, a connecting means, an attaching means and an elongate member that are not disclosed, taught or suggested by the Brace et al. reference. The structural relationships claimed in independent claim 127 allow the connecting means to be compressed or clamped by the fastener and attaching means acting together such that an elongate support member may be locked into position relative to the bone in a manner that is not disclosed, taught or suggested by the Brace et al. reference.

Since the spinal fixation device of the Brace et al. reference does not contain each and every element of independent claim 127, that reference fails to anticipate independent claim 127 or render that claim obvious, and a finding of the same is respectfully requested. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81, 90 (Fed. Cir. 1986); *In re Donohue*, 226 USPQ 619, 621 (Fed. Cir. 1985); *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.*, 224 USPQ 409, 411 (Fed. Cir. 1984). Further, since the Brace et al. reference fails to teach or suggest the concepts present in independent claim 127, that claim is allowable over the Brace et al. reference under 35 U.S.C. § 103, as that section might be applied.

Dependant claims 128-136 depend from claim 127 or a claim depending from claim 127, and are therefore believed to be

allowable for at least the reasons given in support of claim 127. Applicant further requests separate consideration by the Office of these dependent claims on their own merits, since some or all of said dependent claims are believed to be allowable regardless of whether their base independent claim is allowable.

II. CONCLUSION.

In view of the foregoing, applicant believes that claims 1-19, 27-36, 92-101, 127-136, 144-152, 160, 161, 169-177, 191 and 192 are all allowable and the same is respectfully requested. If any impediment to the allowance of these claims remains after entry of this Amendment, and such impediment could be alleviated during a telephone interview, the Examiner is invited to initiate the same.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 50-0836.

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Respectfully submitted,

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